



# Effects of Low-Income Communities on the Accessibility of AAC Devices for Children with Autism Spectrum Disorder

Melanie Laschiver, Kristen Kritou, Danielle Frondi, and Rachel Gindhart  
Monmouth University



## Background

The benefits, accessibility, and knowledge of alternative and augmentative communication (AAC) devices provided to children diagnosed with the autism spectrum disorder (ASD) in low income populations is discussed and evaluated.

## Purpose

The purpose of the study is to investigate the effects of low-income communities on the accessibility of AAC devices for children with ASD.

## Themes & Findings

Matter, R., Harniss, M., Oderud, T., Borg, J., & Eide, A. H. (2016). Assistive technology in resource-limited environments: A scoping review. *Disability and Rehabilitation: Assistive Technology*, 12(2), 1-10. doi:10.1080/17483107.2016.1188170

*Funding.* (2021). Retrieved from tobii dynamox: <https://us.tobii dynamox.com/pages/funding>

Hobbs, K. G. (2020). *Autism Parenting Magazine*. Retrieved from Assistive Communication Devices for Children with Autism: <https://www.autismparentingmagazine.com/assistive-technology-autism/>

*Obtaining Assistive Technology Through Your Child's School.* (2015). Retrieved from Disability Rights California: <https://www.disabilityrightsca.org/system/files/file-attachments/557701.pdf>

## Methods

The literature used in this review was found using a survey-based approach. Utilizing ProQuest, Google Scholar, Wiley Online Library, and EBSCOhost to discover studies that included how low-income effects the accessibility and availability of AAC devices. After finding the articles, a review of the literature from the past 10 years was conducted. Major findings, themes and limitations were compared.

**Key Search Terms:** ASD, AAC devices, low-income, accessibility, speech therapy, education, availability

### **Survey Questions:**

Are you a parent/caregiver of someone with autism?

**YES NO**

Does your child attend public, private, or specialized school?

Does your child currently attend speech therapy? If so, where and why?

**YES, \_\_\_\_\_ NO**

Have you been educated/aware of what an AAC device is?

**Yes NO**

Does your child currently use assistive technology to communicate? If so, which type?

**YES, \_\_\_\_\_ NO**

Based on your location, do you think that you are more or less accessible to assistive technology resources?

**1 2 3 4 5 (1-never -- 5 always)**

How readily available have you found education on AAC devices?

**1 2 3 4 5 (1-never -- 5 always)**

Based on your family's income, would you be able to afford an assistive technology device?

**YES NO**

Is your child on Medicaid? If no, what insurance do you have for your child?

**YES NO, \_\_\_\_\_**

Are you aware if your insurance could cover high-tech AAC devices?

**YES NO**

### **Audio**

<https://www.dropbox.com/sh/0sza0dwa7i8k4ug/AAAXL39o8xWfwJcUJb1qP8FMa?dl=0>

## Limitations

- Insurance
- School district
- Medicare
- Limited research
- Education and knowledge
- Laws and regulations
- Target (caregivers) rather than a general public
- Limited quantity and quality
- Type of device

## Discussion

This literature review provided information about how accessible AAC devices are in low income environments for children with ASD. This research suggests that more research needs to be completed to determine more information on low-income AAC accessibility with children with ASD.

\*more research is needed to determine additional information

## Implications

Although there is a wide range of published and current research in the field of AAC, there is limited research on the accessibility and use of assistive technology in low-income communities in addition to the individuals in low-income populations not having the employment and funds to gain possession of AAC devices